

Application No. 10/809,248
Amendment dated August 3, 2005
Reply to Office Action of March 8, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently amended) A system for maintaining positions of bone surfaces fixed relative to each other, the system comprising:

a first anchor member constructed to be inserted in a bone portion including one of the bone surfaces to be relatively fixed;

a second anchor member constructed to be inserted in another bone portion including the other bone surface to be relatively fixed;

a first cable connected to the first anchor member;

a second cable connected to the second anchor member;

the first and second screw members each having an axial bore in which the respective first and second cables extend and are secured with the bores being configured to minimize discrete stress points on the cables extending therein and out therefrom;

a connector between the first and second cables for interconnecting the cables to each other; and

the first and second anchor members constructed to be [[being]] substantially fully sunk into the bone portions to minimize space taken up thereby at the location in the body containing the bone portions and disposed on opposite sides of the bone surfaces with the connected cables spanning the surfaces to keep the surfaces fixed relative to each other.

2. (Currently amended) The system of claim 1 wherein the bone portions are vertebrae of a spinal column,

third and fourth anchor members and connected third and fourth cables, respectively, with the first and third anchor members constructed to be fully sunk into one vertebra and the second and fourth anchor members constructed to be fully sunk into the other vertebra,

a decompression device constructed to be arranged between the vertebrae for maintaining spacing between facing surfaces of the vertebrae, and

another connector to allow the cables to be connected to form a criss-cross cable pattern for enhanced stability of the decompression device between the vertebrae and increased resistance to torsional forces on the vertebrae during dynamic motion of the spinal column.

3. (Original) The system of claim 1 wherein the anchor members and portions of the cables extending therefrom are generally transversely oriented relative to each other with the cable portions bearing on the bone portions to provide maximum support thereto when connected together.

4.(Original) The system of claim 1 wherein the anchor members are headless bone screws that are threaded for substantially their entire length to allow the cables to ride on the bone portions as a bearing surface therefor to minimize wear thereof.

5. (Original) The system of claim 1 wherein the connector is a crimp connector with the cables tensioned and crimped in the connector to secure the cables in tension to each other.

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6. (Currently amended) A method of stabilizing bone portions relative to each other, the method comprising:

providing screw anchors and cables attached thereto in axial bores of the screw anchors;

engaging an internal driver surface of the screw anchors with a correspondingly configured driver;

threading the screw anchors into predetermined points of insertion therefor on the bone portions until a proximate end of the screw anchors is flush or recessed below the respective bone surfaces; [[and]]

flexing and bending the cables in the axial bores and as the cables exit the bores of the screw members to minimize discrete stress points on the cables; and

connecting portions of the cables extending from the screw anchors across the bone portions to be stabilized.

7. (Currently amended) ~~The method of claim 6~~ A method of stabilizing bone portions relative to each other, the method comprising:

providing screw anchors and cables attached thereto;

engaging an internal driver surface of the screw anchors with a correspondingly configured driver;

threading the screw anchors into predetermined points of insertion therefor on the bone portions until a proximate end of the screw anchors is flush or recessed below the respective bone surfaces; and

connecting portions of the cables extending from the screw anchors across the bone portions to be stabilized,

wherein two pairs of screw anchors are threaded into adjacent vertebrae having a decompression device therebetween with one screw anchor pair in each vertebra, and the cable portions are connected to form a criss-cross pattern to resist shifting of the decompression device.

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8. (New) The system of claim 1 wherein the axial bores each include tapered and radiused surface portions against which the cables bear and which are configured for minimizing stress on the cables.

9. (New) The method of claim 6 wherein the cables are flexed and bent in the axial bores by flexing the cables against a tapered surface portion in each bore and bending the cables about a radiused surface portion in each bore.